

10501089

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

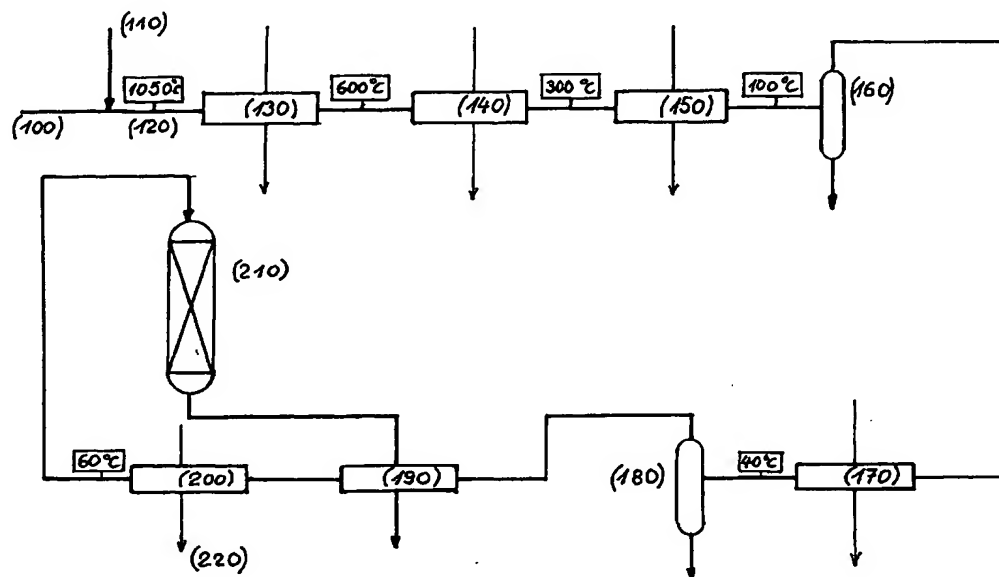
(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
21 August 2003 (21.08.2003)

PCT

(10) International Publication Number
WO 03/068370 A1

- (51) International Patent Classification⁷: **B01D 53/86** (74) Agent: **WAGNER, Jutta**; Zellentin & Partner, Rubensstrasse 30, 67061 Ludwigshafen (DE).
- (21) International Application Number: **PCT/EP03/01539** (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 15 February 2003 (15.02.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
PA 2002 00243 18 February 2002 (18.02.2002) DK (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **HALDOR TOPSOE A/S [DK/DK]**; Nymollevvej 55, DK-2800 Kgs. Lyngby (DK).
- (72) Inventors; and
(75) Inventors/Applicants (*for US only*): **HANSEN, Jens-Henrik, Bak [DK/DK]**; Islandsvej 13 B, DK-2800 Kgs. Lyngby (DK). **HAMMERSHOI, Birgitte [DK/DK]**; Ellefolden 6, DK-2950 Vedbaek (DK). **SIGURDAR-DOTTIR, Inga, Dora [IS/IS]**; Blönduhlíð 33, IS-105 Reykjavík (IS).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: PROCESS FOR THE SELECTIVE REMOVAL OF SULPHUR COMPOUNDS FROM SYNTHESIS GAS



(57) Abstract: A process for the selective removal of sulphur compounds from synthesis gas being rich in carbon monoxide and containing hydrogen, carbon monoxide and containing hydrogen, carbon dioxide and steam comprising contacting the synthesis gas at a maximum contact temperature of 100° C with an absorbent comprising Cu/ZnO compounds and being prepared by thermal decomposition of a corresponding carbonate and activation of the thermal decomposed carbonate with a reducing gas.

WO 03/068370 A1